# Berkeley SafeTREC



SAFE TRANSPORTATION RESEARCH AND EDUCATION CENTER

### TRAFFIC SAFETY FACTS

## **Seat Belt Use**

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#### INTRODUCTION

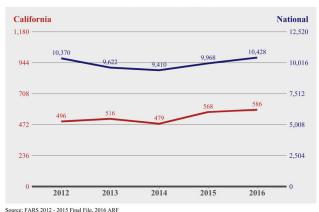
Restraint devices such as seat belts are a key element of motor vehicle occupant protection systems. According to the National Occupant Protection Use Survey (NOPUS), in 2016 there was a 90.1 percent front seat belt use rate for the nation as a whole, a 1.8 percent increase over the 88.5 percent reported in 2015. Front seat belt use was slightly higher among women (92.5 percent) compared with men (88.2 percent). Front passengers were more likely to use seat belts (90.1 percent) than rear seat occupants (80.6 percent). One strong determinant of seat belt use is the presence of a seat belt use law—states with a seat belt law that applied to all vehicle occupants had a rear seat belt use rate of 83.9 percent compared with 75.7 percent in states requiring front seat belt use only. In the United States, there were 10,428 unrestrained passenger vehicle occupants killed in traffic collisions in 2016, a 4.6 percent increase from 9,968 in 2015.

### CALIFORNIA FACTS

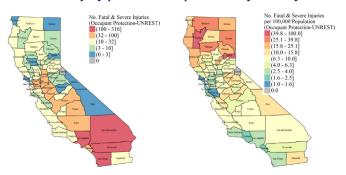
### **CALIFORNIA DATA**

- There were 586 unrestrained occupants killed in traffic collisions in 2016, a 3.2% increase from 568 in 2015.
- In 2016, the state's front seat belt use was observed to be 96.5%, which was the secondhighest use rate in the nation.
- In 2016, seat belts saved 1,476 passenger vehicle occupants, age five and older, involved in traffic collisions. If all vehicle occupants used seat belts, an additional 74 lives would have been saved.
- The counties with the highest numbers of unrestrained occupants with fatal or severe injuries were Los Angeles, San Bernardino, Riverside, and San Diego.
- The state's highest per-population rates of fatal or severe injury among unrestrained occupants were found in rural counties in Northern California. The counties with the highest per-100,000 population rates were Trinity and Sierra. A total of ten rural counties, all in Northern California, had rates greater than 15.8 fatal or severe injuries per 100,000 population.
- Unrestrained occupant fatal and severe injury collision victims were predominantly young male adults age 15 to 34 (40.4%).

### Unrestrained Occupant Fatality Trends, Nationwide and California, 2012-2016



## Unrestrained Occupant Fatal & Severe Injury and Fatal & Severe Injury per 100K Population by County, 2016



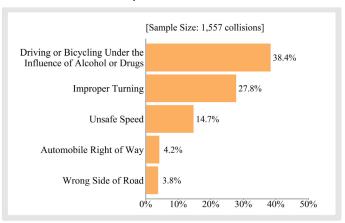
(a) Number of Fatal and Severe Injuries (b) Number of Fatal and Severe Injuries per 100,000 Population Source: FARS ARF 2016; Provisional SWITRS 2016; California Department of Finance 2016

#### **CALIFORNIA DATA**

(continued)

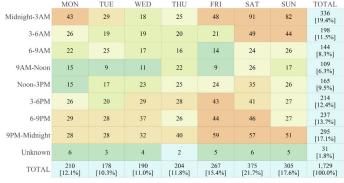
- The most common primary collision factors for unrestrained fatal and severe injury collisions were: driving or bicycling under the influence of alcohol or drugs (38.4%), improper turning (27.8%), and unsafe speed (14.7%).
- Almost half (46.4%) of all occupant protection fatal and severe injuries were due to hit object collisions, followed by overturned (13.7%), rear end (11.8%), and broadside (11.6%).
- Fatal and severe injuries among unrestrained occupants were more prevalent on Fridays, Saturdays, and Sundays, especially during nighttime hours. These time periods coincide with high rates of alcohol-impaired driving.
- Over half (54.7%) of unrestrained occupant fatalities and severe injuries occurred in rural areas compared with 45.3% on urban roads.
  Only about 16% of travel took place on rural roads.
- A little under half (42.0%) of all unrestrained occupant fatalities occurred on non-interstate principal arterials (high-capacity urban roads). The next most common locations for unrestrained occupant fatalities were on an interstate or on a non-interstate collector, both at 17.4% of fatalities.

## Top Five Primary Collision Factors, Fatal & Severe Injury Unrestrained Occupant Collisions, California, 2016



Source: Provisional SWITRS 2016

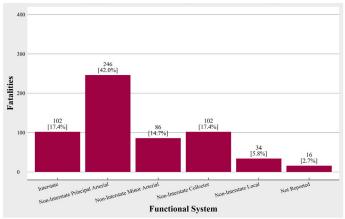
## Time and Day of Week for Unrestrained Occupant Fatal & Severe Injury, California, 2016



FSI Num+% 1 - 15 16 - 23 24 - 27 28 - 41 42 - 91

Source: FARS ARF 2016; Provisional SWITRS 2016

#### Roadway Type for Unrestrained Occupant Fatal Injury, California, 2016



Source: FARS ARF 2016

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